

ABSTRACT

A power amplifier includes a transconductance stage, a cascode stage, and may include a signal level detection and bias determination module. The transconductance stage is operable to receive an input voltage signal and to produce an output current
5 signal. The cascode stage communicatively couples to the transconductance stage and is operable to receive the output current signal and to produce an output voltage signal based thereupon. The cascode stage includes a Metal Oxide Silicon (MOS) transistor and a corresponding parasitic bipolar junction transistor, each of the gate of the MOS transistor and the base of the parasitic bipolar junction transistor available for voltage
10 control. The signal level detection and bias determination module operably couples to the cascode stage and is operable to controllably bias the gate of the MOS transistor and to controllably bias the base of the corresponding parasitic bipolar junction transistor.